



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,101	01/28/2004	Ramachendra P. Batni	LUC-454/Batni 4-5-3	4439
47382 7590 01/03/2007 CARMEN B. PATTI & ASSOCIATES, LLC ONE NORTH LASALLE STREET 44TH FLOOR CHICAGO, IL 60602			EXAMINER FIGUEROA, MARISOL	
			ART UNIT	PAPER NUMBER
			2617	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/03/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/767,101

Applicant(s)

BATNI ET AL.

Examiner

Marisol Figueroa

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/12/2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to Applicant's amendment filed on October 12, 2006. The Applicant amended claims 1, 5-11, 13, 15, 16, 19, and 22, cancelled claim 12, and added claim 23. Accordingly, claims 1-11, and 13-23 are currently pending in the present application. The rejections not addressed below have been withdrawn.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 16, and 22 have been considered but are moot in view of the new ground(s) of rejection.

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, this action is made FINAL.

Claim Objections

4. Claims 1-15, and 23 are objected to because of the following informalities:

(a) Claims 1-15, and 23 are directed to "an apparatus", however, the claims limitations does not cover what the apparatus is, just what it does. It is not clear if the claims are directed to the structure of an originating switching center or a wireless communication system.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the

Art Unit: 2617

subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1, 2, 11-17, 21, and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over CALABRESE et al. (US 6,236,857 B1) in view of LIN et al. (US 5,999,610).

Regarding claim 1, Calabrese discloses an apparatus, comprising:

an originating mobile switching center that handles one or more calls (col. 1, lines 60-65; i.e., Enhanced MSC (E-MSC));

wherein a serving mobile switching center for a communication device on a call of the one or more calls passes control of the call to the originating mobile switching center (col. 2, lines 47-53; col. 3, lines 20-27; col. 5, lines 22-34; when serving MSC receives a call origination from a mobile station that employs an enhanced service, the serving MSC triggers a call to the enhanced MSC); and

wherein the originating mobile switching center triggers the call to a service node, and wherein the service node sends an initial trigger response to the originating mobile switching center that instructs the originating mobile switching center to redirect the call, and wherein the initial trigger response arms one or more triggers that support one or more services for the communication device (col. 3, lines 27-38; col. 3, line 61-col. 4, lines 1-8; the E-MSC originates a call to a Service Node and obtains a result, i.e., trigger response, that the E-MSC uses in redirecting the call); and

wherein the one or more triggers comprise one or more of one or more switch based triggers and one or more subscriber based triggers exclusive of Calling_Routing_Addresss_Available, OAnswer, and ODisconnect triggers (Fig. 3; col. 3, line 61 – col. 4, lines 1-27; col. 5, lines 43-51; col. 6, line 55 – col. 7, lines 1-12); and

Art Unit: 2617

wherein upon receipt of the initial trigger response, the originating mobile switching center encounters one or more of the one or more triggers and triggers the call to one or more other service nodes (col. 3, lines 27-38; the E-MSC originates a call to a Service Node and obtains a result that the E-MSC uses in re-directing the call to a destination station, i.e. service node).

But, Calabrese fails to expressly disclose wherein the one or more subscriber based triggers comprise one or more of Origination_Attempt_Authorized, Collected_Information, and Analyzed_Information triggers.

However, is well known in the art the use of triggers during originating call processing and during the originating call process, the triggers can occur at any one of the trigger detection points (TDP) of: (i) Origination Attempt - after receiving a call setup request, (ii) Information Collected - after receiving enough information to process the call, and (iii) Information Analyzed - after analyzing the received information (col. 5, line 65 - col. 6, lines 1-29).

Therefore, it would have been obvious to a person having ordinary skill in the art, to modify Calabrese to include the subscriber triggers comprising of Origination_Attempt_Authorized, Collected_Information, and Analyzed_Information triggers, as suggested by LIN, because these triggers are conventional and well known in the art during the originating call process and facilitate the redirection of calls.

Regarding claim 2, the combination of Calabrese and Lin disclose the apparatus of claim 1, Calabrese discloses wherein the serving mobile switching center does not support the one or more triggers and the originating mobile switching center supports the one or more triggers (col. 1, lines 13-19; col. 2, lines 37-53; when a mobile station requires an enhance service that the Serving MSC does not support the call is transported to the Enhanced MSC which routes the call to the proper

Art Unit: 2617

enhance service, i.e., service node, implying that the E-MSC supports one or more triggers that the S-MSC does not support to route the call to a service node).

Regarding claim 11, the combination of Calabrese and Lin disclose the apparatus of claim 1, Calabrese discloses wherein the one or more triggers comprise one or more first switch based triggers, wherein the originating mobile switching center is pre-provisioned with one or more second switch based triggers; and wherein the initial trigger response arms one or more subscriber based triggers at the originating mobile switching center (col. 6, lines 6-36).

Regarding claim 13, the combination of Calabrese and Lin disclose the apparatus of claim 1, Calabrese discloses in combination with the service node, and wherein the service node comprises a first service node (Fig. 4; i.e., service node 115), and wherein the one or more other service nodes comprise a second service node (Fig. 4; i.e., destination station 119), and wherein the first service node receives destination digits for the call; wherein the first service node changes the destination digits into a digit string associated with the second service node and sends the initial trigger response to the originating mobile switching center (col. 5, line 43 - col. 6, lines 1-5).

Regarding claim 14, the combination of Calabrese and Lin disclose the apparatus of claim 1, Calabrese discloses wherein the initial trigger response comprises a Specific_Called_Party_Digit_String Termination AnalyzedInformation operation return result message, wherein the Specific_Called_Party_Digit_String Termination AnalyzedInformation operation return result message comprises an indication to arm the one or more triggers and a termination list set to redirect the call to one or more of the one or more other service nodes (col. 3, lines 30-38; col. 6, lines 29-36).

Regarding claim 15, the combination of Calabrese and Lin disclose the apparatus of claim 1, Calabrese discloses wherein the service node requests a list of the one or more triggers from a

Art Unit: 2617

home location register; and wherein the service node sends the list of the one or more triggers in the initial trigger response to the originating mobile switching center (col. 4, lines 11-44).

Regarding claim 16, Calabrese discloses a method, comprising the steps of:

receiving control of a call from a serving mobile switching center (col. 2, lines 47-53; col. 3, lines 20-27; col. 5, lines 22-34; when serving MSC receives a call origination from a mobile station that employs an enhanced service, the serving MSC triggers a call to the enhanced MSC);

triggering the call to a service node that employs an initial trigger response to arm one or more triggers, wherein the one or more triggers comprise one or more of one or more switch based triggers and one or more subscriber based triggers exclusive of Calling_Routing_Addresss_Available, OAnswer, and ODisconnect triggers (col. 3, lines 27-38; col. 3, line 61-col. 4, lines 1-8; the E-MSC originates a call to a Service Node and obtains a result, i.e., trigger response, that the E-MSC uses in redirecting the call);

encountering one or more of the one or more triggers associated with one or more other service nodes; and triggering the call to one or more of the one or more other service nodes upon receipt of the initial trigger response (col. 3, lines 27-38; the E-MSC originates a call to a Service Node and obtains a result that the E-MSC uses in re-directing the call to a destination station, i.e. service node).

But, Calabrese fails to expressly disclose wherein the one or more subscriber based triggers comprise one or more of Origination_Attempt_Authorized, Collected_Information, and Analyzed_Information triggers.

However, is well known in the art the use of triggers during originating call processing and during the originating call process, the triggers can occur at any one of the trigger detection points (TDP) of: (i) Origination Attempt - after receiving a call setup request, (iii) Information Collected –

Art Unit: 2617

after receiving enough information to process the call, and (iii) Information Analyzed – after analyzing the received information (col. 5, line 65 – col. 6, lines 1-29).

Therefore, it would have been obvious to a person having ordinary skill in the art, to modify Calabrese to include the subscriber triggers comprising of Origination_Attempt_Authorized, Collected_Information, and Analyzed_Information triggers, as suggested by LIN, because these triggers are conventional and well known in the art during the originating call process and facilitate the redirection of calls.

Regarding claim 17, the combination of Calabrese and Lin disclose the method of claim 16, Calabrese discloses wherein the initial trigger response comprises an indication of one or more subscriber based triggers; the method further comprising the step of: arming the one or more subscriber based triggers for one or more services indicated in the initial trigger response (col. 3, lines 27-38; the E-MSC originates a call to a Service Node and obtains a result that the E-MSC uses in re-directing the call to a destination station, i.e. service node).

Regarding claim 21, the combination of Calabrese and Lin disclose the method of claim 16, Calabrese discloses wherein the step of encountering the one or more of the one or more triggers associated with the one or more other service nodes comprises the step of: receiving an Specific_Called_Party_Digit_String Termination AnalyzedInformation operation return result message that comprises an indication to arm the one or more triggers and a termination list set to redirect the call to one or more of the one or more other service nodes to provide one or more services to a communication device (col. 3, lines 30-38; col. 6, lines 29-36).

Regarding claim 22, Calabrese discloses an article, comprising: one or more computer-readable signal-bearing media;

means in the one or more media for receiving control of a call from a serving mobile switching center (col. 2, lines 47-53; col. 3, lines 20-27; col. 5, lines 22-34; when serving MSC receives a call origination from a mobile station that employs an enhanced service, the serving MSC triggers a call to the enhanced MSC);

means in the one or more media for triggering the call to a service node that employs an initial trigger response to arm one or more triggers, wherein the one or more triggers comprise one or more of one or more switch based triggers and one or more subscriber based triggers exclusive of Calling_Routing_Addresss_Available, OAnswer, and ODisconnect triggers (col. 3, lines 27-38; col. 3, line 61-col. 4, lines 1-8; the E-MSC originates a call to a Service Node and obtains a result, i.e., trigger response, that the E-MSC uses in redirecting the call);

means in the one or more media for encountering one or more of the one or more triggers associated with one or more other service nodes; and means in the one or more media for triggering the call to one or more of the one or more other service nodes upon receipt of the initial trigger response (col. 3, lines 27-38; the E-MSC originates a call to a Service Node and obtains a result that the E-MSC uses in re-directing the call to a destination station, i.e. service node).

But, Calabrese fails to expressly disclose wherein the one or more subscriber based triggers comprise one or more of Origination_Attempt_Authorized, Collected_Information, and Analyzed_Information triggers.

However, is well known in the art the use of triggers during originating call processing and during the originating call process, the triggers can occur at any one of the trigger detection points (TDP) of: (i) Origination Attempt - after receiving a call setup request, (ii) Information Collected - after receiving enough information to process the call, and (iii) Information Analyzed - after analyzing the received information (col. 5, line 65 - col. 6, lines 1-29).

Art Unit: 2617

Therefore, it would have been obvious to a person having ordinary skill in the art, to modify Calabrese to include the subscriber triggers comprising of Origination_Attempt_Authorized, Collected_Information, and Analyzed_Information triggers, as suggested by LIN, because these triggers are conventional and well known in the art during the originating call process and facilitate the redirection of calls.

7. **Claims 3, 8, and 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over CALABRESE et al. in view of LIN et al., and further in view of KARLSSON (US 2005/0262020 A1).

Regarding claim 3, the combination of Calabrese and Lin disclose the apparatus of claim 1, but the combination does not expressly disclose wherein the communication device comprises a prepaid mobile communication device, wherein the service node comprises a prepaid service node; wherein the prepaid service node supports billing for the prepaid mobile communication device.

However, Karlsson teaches that prepaid services market has grown all over the world because it provides services without the need of signing a contract. To provide this service, the Service Node approach is the most commonly used. In the SN approach, a prepaid customer dials a party's telephone number, the MSC identifies that the caller is a prepaid customer and sets up a connection towards the SN. The SN authorizes the call by consulting a prepaid billing platform and if the call request is granted the SN sets up a trunk back to the MSC, and the trunk is eventually connected to the called party. After that, the SN starts credit decrementing for the duration of the call (p.0006-0009, and p.0011).

Therefore, one person of ordinary skill in the art at the time of the invention would have been motivated, to include a prepaid mobile communication device, and a prepaid service node; wherein the service node supports billing for the prepaid mobile communication device, as taught by

Art Unit: 2617

Karlsson, since Karlsson teaches that it is well known in the art that the provisioning of a prepaid service node is the most commonly used approach for providing wireless telephony service to the increased number of prepaid customers.

Regarding claim 8, the combination of Calabrese and Lin disclose the apparatus of claim 1, Calabrese discloses in combination with the service node and the one or more other service nodes, wherein one or more of the one or more other service nodes provide one or more of the one or more services to the mobile communication device on the call; and wherein the one or more of the one or more other service nodes send one or more service identifications to the originating mobile switching center to indicate use of the one or more of the one or more other service nodes by the prepaid mobile communication device (col. 1, lines 13-39; col. 3, lines 20-60).

But, Calabrese does not expressly disclose wherein the communication device comprises a prepaid mobile communication device. However, Karlsson teaches that prepaid services market has grown all over the world because it provides services without the need of signing a contract (p.0006-0009).

Therefore, one person of ordinary skill in the art at the time of the invention would have been motivated, to include a prepaid mobile communication device, as suggested by Karlsson, because a prepaid mobile communication device provides the advantage of obtaining wireless communication services without having to sign a contract.

Regarding claim 10, the combination of Calabrese, Lin, and Karlsson disclose the apparatus of claim 8, Calabrese discloses wherein the one or more services comprise one or more triggered services; wherein the service node sends the initial trigger response to the originating mobile switching center to arm the one or more triggers at the originating mobile switching center so the originating mobile switching center is able to provide access to the one or more triggered

Art Unit: 2617

services (col. 3, lines 27-38; the E-MSC originates a call to a Service Node and obtains a result that the E-MSC uses in re-directing the call to a destination station, i.e. service node).

8. **Claims 4, 5, and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over CALABRESE et al. in views of LIN et al., and KARLSSON, and further in view of DONOVAN et al. (US 6,075,982).

Regarding claim 4, the combination of Calabrese, Lin, and Karlsson disclose the apparatus of claim 3, but does not expressly disclose wherein the originating mobile switching center sends to the prepaid service node one or more service identifications that are associated with one or more of the one or more other service nodes and employable by the prepaid service node to calculate billing information based on use of the one or more of the one or more other service nodes by the prepaid mobile communication device.

However, Donovan teaches a system for prepaying for wireless service, in which the mobile switching center receives the call and routes the call to a wireless enhanced service platform, by sending an origination request (consisting of an initial address message) to the wireless enhanced service platform. The initial address message contains the fields that describe the nature of the connection, the calling party, the called party (i.e., dialed digits specify the service or identifier of a service) and other attributes needed to connect and bill a call (Fig. 1; col. 3, lines 49-col. 4, lines 1-37; col. 5, lines 48-65). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, wherein the mobile switching center sends to the prepaid node one or more service identifications associated with one or more service nodes that are employable by the prepaid node to calculate billing information based on the use of the other service nodes, as suggested by Donovan, in order for the prepaid service node to make a determination of whether the subscriber has sufficient funds in his or her account to connect the call.

Regarding claim 5, the combination of Calabrese, Lin, and Karlsson disclose the apparatus of claim 3, Calabrese discloses wherein one or more of the one or more other service nodes provide one or more of the one or more services to the prepaid mobile communication device (Fig. 2; col. 1, lines 12-33).

But, the combination of Calabrese, Lin, and Karlsson doesn't expressly disclose wherein the originating mobile switching center sends to the prepaid service node one or more service identifications that are associated with the one or more of the one or more services and employable by the prepaid service node to calculate billing information based on receipt of the one or more of the one or more services by the prepaid mobile communication device.

However, Donovan teaches a system for prepaying for wireless service, in which the mobile switching center receives the call and routes the call to a wireless enhanced service platform, by sending an origination request (consisting of an initial address message) to the wireless enhanced service platform. The initial address message contains the fields that describe the nature of the connection, the calling party, the called party (i.e., dialed digits specify the service or identifier of a service), and other attributes needed to connect and bill a call (Fig. 1; col. 3, lines 49-col. 4, lines 1-37; col. 5, lines 48-65). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, wherein the mobile switching center sends to the prepaid node one or more service identifications associated with one or more service nodes that are employable by the prepaid node to calculate billing information based on the use of the other service nodes, as suggested by Donovan, in order for the prepaid service node to make a determination of whether the subscriber has sufficient funds in his or her account to connect the call.

Regarding claim 18, the combination of Calabrese and Lin disclose the method of claim 16, but the combination does not expressly disclose wherein the service node comprises a prepaid service node.

However, Karlsson teaches that prepaid services market has grown all over the world because it provides services without the need of signing a contract. To provide this service, the Service Node approach is the most commonly used. In the SN approach, a prepaid customer dials a party's telephone number, the MSC identifies that the caller is a prepaid customer and sets up a connection towards the SN. The SN authorizes the call by consulting a prepaid billing platform and if the call request is granted the SN sets up a trunk back to the MSC, and the trunk is eventually connected to the called party. After that, the SN starts credit decrementing for the duration of the call (p.0006-0009, and p.0011).

Therefore, one person of ordinary skill in the art at the time of the invention would have been motivated, to include a prepaid mobile communication device, and a prepaid service node; wherein the service node supports billing for the prepaid mobile communication device, as taught by Karlsson, since Karlsson teaches that it is well known in the art that the provisioning of a prepaid service node is the most commonly used approach for providing wireless telephony service to the increased number of prepaid customers.

The combination of Calabrese, Lin, and Karlsson does not expressly disclose that the method further comprising the step of: sending to the prepaid service node one or more service identifications that are associated with one or more of the one or more other service nodes and employable by the prepaid service node to calculate billing information based on use of the one or more of the one or more other service nodes by a prepaid mobile communication device.

However, Donovan teaches a system for prepaying for wireless service, in which the mobile switching center receives the call and routes the call to a wireless enhanced service platform, by sending an origination request (consisting of an initial address message) to the wireless enhanced service platform/prepaid platform. The initial address message contains the fields that describe the nature of the connection, the calling party, the called party (i.e., dialed digits specify the service or identifier of a service), and other attributes needed to connect and bill a call (Fig. 1; col. 3, lines 49-col. 4, lines 1-37; col. 5, lines 48-65).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, wherein the mobile switching center sends to the prepaid node one or more service identifications associated with one or more service nodes that are employable by the prepaid node to calculate billing information based on the use of the other service nodes, as suggested by Donovan, in order for the prepaid service node to make a determination of whether the subscriber has sufficient funds in his or her account to connect the call.

9. **Claims 6 and 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over CALABRESE et al. in views of LIN et al., and KARLSSON, and further in view of O' DONNELL (US 2004/0240646 A1).

Regarding claim 6, the combination of Calabrese, Lin, and Karlsson disclose the apparatus of claim 3, Calabrese discloses wherein upon receipt of the initial trigger response, the originating mobile switching center encounters a dialed digits trigger which triggers the call to a service node (col. 3, lines 27-38; the E-MSC originates a call to a Service Node and obtains a result, i.e., trigger response, which is a telephone number specified by digits, that the E-MSC uses in re-directing the call to a destination station, i.e. service node).

The combination of Calabrese, Lin, and Karlsson does not expressly disclose wherein the one or more other service nodes comprises a directory assistance service node and when the originating mobile switching center encounters a dialed digits trigger which triggers the call to the directory assistance service node to provide directory assistance service to the prepaid mobile communication device.

However, O' Donnell teaches that if a mobile subscriber dials an information toll service, the mobile switching center recognizes the assigned number such as "411" and routes the call to the appropriate feature platform, i.e., service node, which includes a directory assistance service according to the dialed digits (p.0007).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify the combination to further include one or more other service nodes comprising a directory assistance service and wherein a dialed digits trigger a call to a directory assistance service to provide a directory assistance service, as suggested by O' Donnell, since it is well known that the directory assistance service is very popular and one of ordinary skill in the art would have been motivated to provide those services to prepaid customers.

Regarding claim 7, the combination of Calabrese, Lin, Karlsson, and O' Donnell disclose the apparatus of claim 6, Calabrese discloses wherein the originating mobile switching center creates a temporary connection between the prepaid mobile communication device and the directory assistance service node for a duration of the directory assistance service; wherein the originating mobile switching center removes the directory assistance service node from a path of the call upon completion of the directory assistance service (col. 7, lines 6-21; the E-MSC sets up a call via a local network to a Service Node, e.g., prepaid node or directory assistance node, the Service Node then interacts with the user and when the interaction is over the E-MSC releases the call set up).

10. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over CALABRESE et al. in views of LIN et al., and KARLSSON, and further in view of Patel (US 5,835,856).

Regarding claim 9, the combination of Calabrese and Karlsson disclose the apparatus of claim 8, the combination of Calabrese and Karlsson disclose wherein the service node comprises a prepaid service node (see remarks of claim 3), but does not expressly disclose wherein the originating mobile switching center sends the one or more service identifications, one or more billing rates, and one or more call durations to the prepaid service node for employment by the prepaid service node to calculate an amount to deduct from an account balance associated with the prepaid mobile communication device.

However, Patel teaches that for charging purposes a charging module in the MSC monitors the call in progress and produces a call detail record including information such as duration of the call, the calling/called party number (i.e., service identifier), etc., that is then transported to the billing center for producing a bill or in case of a prepaid subscriber, deducting the charges from the prepaid account (col. 3, lines 25-45). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, wherein the mobile switching center sends the one or more service identifications, one or more billing rates, and one or more call durations to the prepaid service node to calculate an amount to deduct, as suggested by Patel, because these are the conventionally known items of information needed to generate billing statements for charging the mobile subscribers.

11. **Claims 19 and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over CALABRESE et al. in views of LIN et al., KARLSSON, and DONOVAN et al., and further in view of O' DONNELL.

Art Unit: 2617

Regarding claim 19, the combination of Calabrese, Lin, Karlsson, and Donovan disclose the method of claim 18, but does not expressly disclose wherein the one or more other service nodes comprises a directory assistance service node, wherein the step of encountering the one or more of the one or more triggers associated with the one or more other service nodes comprises the step of: encountering a dialed digits trigger with a destination of the directory assistance service node upon receipt of the initial trigger response; wherein the step of triggering the call to the one or more of the one or more other service nodes upon receipt of the initial trigger response comprises the step of: triggering the call to the directory assistance service node to provide directory assistance service to the prepaid mobile communication device.

However, O' Donnell teaches that if a mobile subscriber dials an information toll service, the mobile switching center recognizes the assigned number such as "411" and routes the call to the appropriate feature platform, i.e., service node, which includes a directory assistance service according to the dialed digits (p.0007).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, wherein the one or more other service nodes comprise a directory assistance service and wherein a dialed digits trigger a call to a directory assistance service to provide a directory assistance service, as suggested by O' Donnell, since it is well known in the art that directory assistance services are very popular and one of ordinary skill in the art would have been motivated to provide those services to prepaid customers.

Regarding claim 20, the combination of Calabrese, Lin, Karlsson, Donovan, and O'Donnell disclose the method of claim 19, Calabrese discloses wherein the step of triggering the call to the directory assistance service node to provide directory assistance service to the prepaid mobile communication device comprises the steps of: creating a temporary connection between the

Art Unit: 2617

prepaid mobile communication device and the directory assistance service node for a duration of the directory assistance service; and removing the directory assistance service node from a path of the call upon completion of the directory assistance service (col. 7, lines 6-21; the E-MSC sets up a call via a local network to a Service Node, e.g., prepaid node or directory assistance node, the Service Node then interacts with the user and when the interaction is over the E-MSC releases the call set up).

12. **Claim 23** is rejected under 35 U.S.C. 103(a) as being unpatentable over CALABRESE et al. (US 6,236,857 B1) in view of McDONNELL et al. (US 6,373,930 B1)..

Regarding claim 1, Calabrese discloses an apparatus, comprising:

an originating mobile switching center that handles one or more calls (col. 1, lines 60-65; i.e., Enhanced MSC (E-MSC));

wherein a serving mobile switching center for a communication device on a call of the one or more calls passes control of the call to the originating mobile switching center (col. 2, lines 47-53; col. 3, lines 20-27; col. 5, lines 22-34; when serving MSC receives a call origination from a mobile station that employs an enhanced service, the serving MSC triggers a call to the enhanced MSC); and

wherein the originating mobile switching center triggers the call to a service node, and wherein the service node sends an initial trigger response to the originating mobile switching center that instructs the originating mobile switching center to redirect the call, and wherein the initial trigger response arms one or more triggers that support one or more services for the communication device (col. 3, lines 27-38; col. 3, line 61-col. 4, lines 1-8; the E-MSC originates a call to a Service Node and obtains a result, i.e., trigger response, that the E-MSC uses in redirecting the call); and

wherein upon receipt of the initial trigger response, the originating mobile switching center encounters one or more of the one or more triggers and triggers the call to one or more other service nodes (col. 3, lines 27-38; the E-MSC originates a call to a Service Node and obtains a result that the E-MSC uses in re-directing the call to a destination station, i.e. service node).

But, Calabrese does not expressly disclose wherein the one or more triggers comprise one or more of one or more of Calling_Routing_Addresss_Available, OAnswer, and ODisconnect triggers.

However, McConnell teaches that according to a recommendation for "prepaid charging" (e.g., enhance service), prepaid service can be facilitated by implementing a variety of WIN triggers such as Initial_Origination and Initial_Termination triggers, Calling_Routing_Address_Available and Called_Routing_Address_Available triggers, and O_Answer and O_Disconnect triggers, which the MSC uses to invoke prepaid services for prepaid subscribers (col. 7, lines 30-59).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify Calabrese to include the use triggers comprising of Calling_Routing_Addresss_Available, OAnswer, and ODisconnect triggers, as suggested by McDonnell, because these triggers facilitate the implementation of prepaid services (enhanced service) for prepaid subscribers.

Prior Art of Record

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(a) DONOVAN et al. (US 292,565 B1) – Method of jetting up a call using a wireless prepaid platform integration with SS7 ISUP interface.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marisol Figueroa whose telephone number is (571) 272-7840. The examiner can normally be reached on Monday Thru Friday 8:30 a.m. - 5:00 p.m..

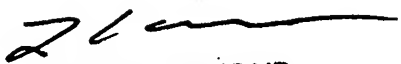
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester G. Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like

Art Unit: 2617

assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Marisol Figueroa
Art Unit 2617


LESTER G. KINCAID
SUPERVISORY PRIMARY EXAMINER